

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Alfred E. KELLER

SERIAL NO.: 09/625,710

FILED: July 25, 2000

FOR: Process for Producing Syngas
In A Short Contact Time
Reactor Using Catalytic Partial
Oxidation of Hydrogen Sulfide
Hydrogen Sulfide

GROUP ART UNIT: 1764

EXAMINER: Douglas W. Rudnick

FAX RECEIVED
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GROUP 1700

RESPONSE TO FINAL OFFICE ACTION DATED JULY 31, 2002

Atty. Dkt. No.: 1856-00301 (98/003)

Date: September 11, 2002

Commissioner for Patents
Washington, DC 20231

Sir:

Applicant acknowledges receipt of the Final Office Action dated July 31, 2002 in the above-identified matter. In response, Applicant requests entry of the following amendments and consideration of the remarks that follow.

AMENDMENTSIn the Claims:

Please cancel claims 14 and 24.

Please amend claims 8, 15, 17 and 23 to read, respectively, as follows:

8. (Twice Amended) A system for the partial oxidation of light hydrocarbons and the partial oxidation of H₂S, comprising a hydrocarbon injection line, an H₂S injection line in communication with said hydrocarbon injection line, an oxygen injection line in communication with said hydrocarbon injection line, a reaction zone receiving gases from said hydrocarbon, H₂S and oxygen injection lines and including a catalyst suitable for catalyzing the partial oxidation of said hydrocarbon and the partial oxidation of H₂S to form a product comprising CO, H₂, elemental sulfur and H₂O, and, downstream from said reaction zone, at least one cooling zone including a sulfur condenser for removing elemental sulfur from said product.